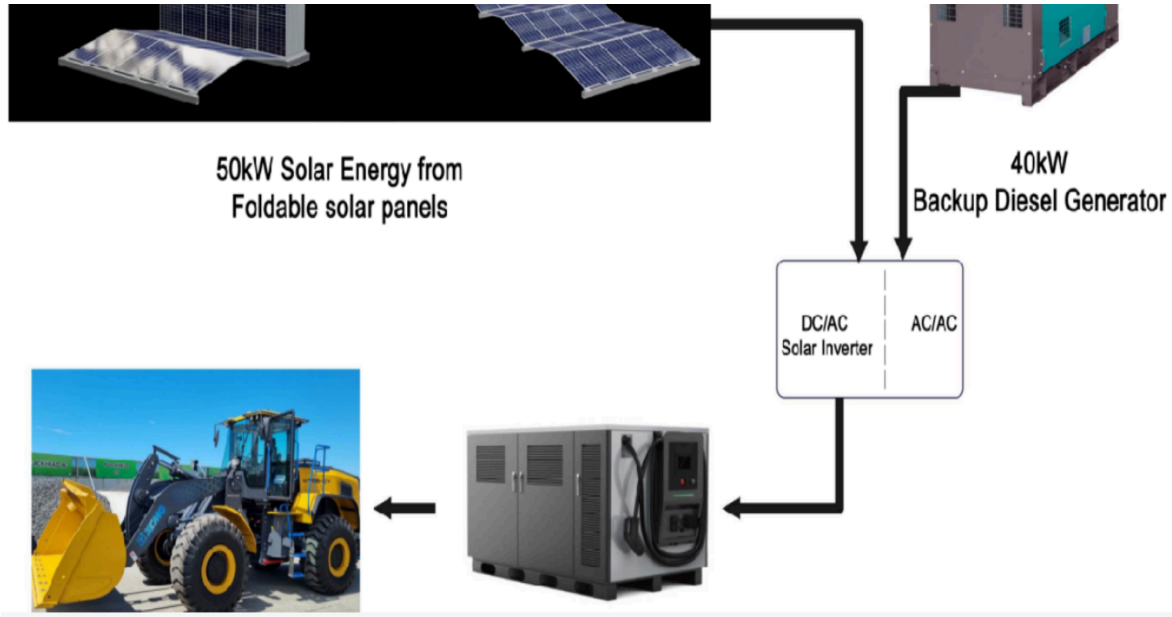
📝 Mining & Agriculture Solutions

Our Mining and Agriculture Charging Solution utilises solar energy to generate electricity, storing it in our energy storage units. This stored energy is then supplied to charging stations for users to charge their equipment. Additionally, in cases where solar power is insufficient, we have integrated diesel generators to provide backup electricity. This solution addresses potential power shortages in mining and agricultural areas while also helping to reduce electricity costs. Leveraging clean energy sources contributes to environmental preservation.s where there is limited electricity capacity available. This solution ensures effective charging operations even when there are constraints on the available power supply, typically in areas or facilities with restricted electricity capacity. We address various power shortages by adjusting power through different means, ensuring efficient charging despite the limitations.



Application Scenarios and Functionality Overview

Two 215kWh Energy Storage Systems (ESS) equipped with LiFePO4 battery cells, seamlessly integrated with AC and DC chargers. These robust units, each weighing

2100kg and boasting an IP54 protection rating, ensure reliable power supply in any environment, augmented by solar energy where available.

Harnessing the sun's energy, our solution maximizes sustainability by utilizing solar power for charging whenever possible. In instances of insufficient solar energy, our system seamlessly switches to backup diesel generators to ensure uninterrupted charging operations. Accompanied by a 180kW DC charger and a 22kW AC charger, our solution simplifies deployment without requiring grid expansion or switchboard upgrades. With the capability to fully charge vehicles within 20 hours and ensure one daily charge-discharge cycle, our solution not only guarantees efficiency but also sustainability. By combining solar energy and backup diesel power, we drive progress in mining and agriculture while minimizing environmental impact.

Load such as E-Truck

Integrated Power Solution for Electric Loader

Incorporating a 120kW, 161kWh energy storage unit, including batteries, alongside a 50kW foldable solar panel array and a 40kW backup diesel generator, our energy storage system receives a reliable power supply. The charging stations provide electric energy to our electric loader, with specifications including a 1.0m3 bucket load capacity, 1800kg rated load, and 40/24kW rated power. With an operating weight of 6700kg and a maximum breakout force of 60.5kN, the loader measures 5670×2060×3405mm (LxWxH).